The antioxidant activity and content of phenolic substances in vegetable broths were determined. Green beans, beetroots, courgettes, onions, parsley, carrots, cabbages, celery, broccoli, spinach, cauliflowers, and tomatoes were subjected to boiling. Fresh vegetables and vegetable broths were analysed for ascorbic acid content, total phenolic content, ORAC and TEAC values. Phenolic acids were quantified using HPLC. The ascorbic acid content of vegetables ranged from 5–109 mg/100 ml, while no ascorbic acids could be detected in vegetable broths. Total phenolic content was between 17–1729 mg GAE/l for all samples. ORAC and TEAC values of vegetable broths were between 0–3 µmol TE/ml and 0–2 µmol TE/ml, respectively. Gallic, chlorogenic, caffeic, p-coumaric, and ferulic acid were detected in both fresh vegetables and vegetable broths. The highest phenolic acid content was observed in water in which beetroots were boiled. It was found that the vegetable broths of beetroots, celery stalks, cabbages, parsley and broccoli harboured remarkable antioxidant activity.